

Introduction

Photocentric's Daylight Magna Duramax formulation has been created for manufacturing functional parts that are durable and long lasting with high impact strength. Parts are stiff but can flex under strain, and quickly returning to their original form.

Best Used for:

- Jigs and fixtures requiring minimal deflection
- Cover-plates and enclosures •
- Fastenings, tools and couplings •
- Suitable for end-use parts

Unique Features:

- Smooth surface finish
- Tough, durable and long-lasting
- Exhibits intricate details
- High strength and stiffness







Technical Data

Phot Centric

Processing Instructions

- To print with Photocentric Liquid Crystal Magna, choose 'Duramax' and the desired layer thickness when preparing your print file in Photocentric Studio.
- Heat the resin to 30°C in the bottle.
- Shake the resin bottle for 2 minutes before pouring into the resin vat.

Post Processing

- Parts can be washed in 15 minutes using Photocentric Resin Cleaner or alternatively, in 10 minutes using Photocentric Resin Cleaner 30.
- Once washed, rinse with warm water for 2 minutes
- Dry with compressed air to remove any remaining water. Or alternatively, leave to air-dry.
- Place the platform into the Photocentric Cure L2 for a minimum of 4 hours at 60°C or until parts are fully cured. It can vary from 4-8 hours depending on dimensions of the parts.
- Remove the platform from the Cure L2 and allow it cool to room temperature. Remove the printed parts with the supplied scraper or the soft spatula.

Properties

Tensile Properties		
Tensile Modulus *	1760 MPa	ASTM D638
Ultimate Tensile Strength *	50 MPa	ASTM D638
Elongation at break *	19%	ASTM D638
Flexural Properties		
Flexural Modulus *	1600 MPa	ASTM D790
Flexural Strength *	70 MPa	ASTM D790
Impact Properties		
Impact Strength Notched Izod *	51 J/m	ASTM D256
Impact Strength Notched Izod *	5.4 kJ/m2	ISO 180
General Properties		
Shore Hardness *	70 Shore D	ASTM D2240
Heat Deflection Temperature	60°C	ASTM D648
Water Absorption (Short Term)	1.4%	ASTM D570
Viscosity	395 cPs	At 25°C Brookfield spindle 3
Density	1.11 g/cm3	
Storage	10 <t>50°C</t>	

* Mechanical properties stated based on fully cured material.



